

REMARKS/ARGUMENTS

(1) Summary of Office Action

In the Office Action dated April 4, 2006, the Examiner objected to claims 1 to 21 under 35 U.S.C. 112, first paragraph on the grounds that the specification was not enabling for the prevention of gastrointestinal infection in livestock.

In the addition, Claims 1 - 22 were rejected under 35 U.S.C. §103(a) as being unpatentable in light of the combined teachings of European Patent Application No. 0 466 244 of Unilever NV; European Patent Application No. 0 955 061 of Medipharma CZ, s.r.o.; Japanese Patent Application No. 62145025 of Nippon Kayaku and/or the non-patent reference of Ibrahim (Natural Food Antimicrobial System).

(2) Claim Amendments

The applicant has cancelled claims 1 to 22 and added new claims 23 to 48. The limitations recited in the newly added claims correspond substantially to those of the cancelled claims. The newly added claims 23 to 46 are directed towards a method of suppressing the growth of enteric pathogens in the gut of livestock whereas claims 47 and 48 are directed to a method of treating gastrointestinal infections in livestock.

With the deletion of claims 1 to 22, the Examiner's rejections of the claims are now considered to be moot and accordingly, need not be addressed.

Claim 23

New claim 23 is an independent claim directed toward a method of suppressing the growth of enteric pathogens in the gut of livestock. The claimed method includes administering to livestock an antimicrobial composition which has (a) a cell wall lysing substance or its salt; (b) at least one of dried egg powder and albumen; and (c) a sequestering agent.

The applicant respectfully submits that new claim 23 is patentable over the prior art references cited by the Examiner, whether taken alone or in combination. In particular, the combined teachings of the prior art references neither teach nor suggest the use of the claimed antimicrobial composition in a method of suppressing the growth of enteric pathogens in the gut of livestock.

The applicant further wishes to bring to the Examiner's attention the following comments in respect of the prior art references.

European Patent Application No. 0 466 244 of Unilever NV

Unilever teaches a mixture of cell wall lysing substance such as lysozyme, an antimicrobial such as the bacteriocin nisin and citric acid or a salt thereof. Regarding practical uses for this mixture, Unilever states the following on page 1 lines, 1 to 13:

“The present invention relates to improving the suppression of growth of micro-organisms in various products and/or safety of such products, in particular to improvements in combating contamination with *Listeria* bacteria. More particularly, it relates to

- a composition having improved antibacterial properties, suitable for combating microbial, in particular bacterial, composition of various products;

- the use of such composition

- - in a process for improving the suppression of growth of micro-organisms in various products and/or the safety of such products;

- - in a process for treating equipment for handling or processing food products, animal feedstuffs, cosmetic products, or pharmaceutical products, by contacting the equipment with such a composition; and

- - in a process for improving the safety of packed products by contacting at least part of the packaging material with such a composition...” [underline added for emphasis]

and on page 3, lines 47 to 50:

“The main application for this invention is in connection with the production, packaging and storage of food products and the cleaning of equipment used therefor, but the invention can be applied for non-food uses, examples of which comprise animal feedstuffs, cosmetic products, and pharmaceutical products and their production.”

Unilever teaches using the composition to combat contamination with *Listeria* bacteria in products including animal feedstuffs. The reference further describes a process for treating equipment for handling or processing animal feedstuffs which involves contacting the equipment with such a composition. It is important to note that, in contrast to the claimed invention, the composition and processes of Unilever target the suppression of bacterial growth in products not livestock. Unilever neither mentions nor suggests that its composition may be administered to livestock to suppress the growth of enteric pathogens in the gut of livestock.

European Patent Application No. 0 955 061 of Medipharm

Medipharm discloses an oral product for the prevention and therapy of porcine gastrointestinal infections containing antibodies to specific viruses and bacteria, obtained from egg yolks of immunized hens. However, the oral product of Medipharm does not include a cell wall lysing substance or its salt, and a sequestering agent as recited in claim 23.

The applicant respectfully submits that there is no motivation for a person skilled in the art to take the composition described in Unilever (used to suppress bacterial growth in products) combine it with the oral product of Medipharm and administer the combination to livestock.

Claims 24 - 46

New claims 24 - 46 ultimately depend from claim 23 and are directed toward various features of the claimed method. Insofar as claim 23 is presently allowable over the cited prior art, the applicant respectfully submits that claims 24 - 46 are also allowable.

Claim 47

New claim 47 is an independent claim directed toward a method of treating gastrointestinal infections in livestock. The claimed method includes administering to livestock an antimicrobial composition which has (a) a cell wall lysing substance or its salt; (b) at least one of dried egg powder and albumen; and (c) a sequestering agent.

The applicant respectfully submits that new claim 47 is patentable over the prior art references cited by the Examiner, whether taken alone or in combination. In particular, the combined teachings of the prior art references neither teach nor suggest the use of the claimed antimicrobial composition in a method of treating gastrointestinal infections in livestock. In this regard, the applicant respectfully requests the Examiner consider the comments provided by the applicant relating to the Unilever and Medipharm references.

Claims 48

New claim 48 ultimately depends from claim 47 and is directed toward an additional feature of the claimed method. Insofar as claim 47 is presently allowable over the cited prior art, the applicant respectfully submits that claim 48 is also allowable.

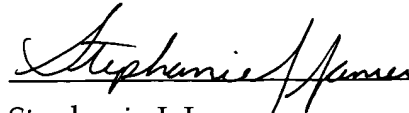
(3) **Conclusion**

The present amendment imports no new subject matter into the application.

Consideration of the above-identified application is respectfully requested. If after reviewing this amendment, the Examiner believes that a telephone or personal interview would facilitate the resolution of any remaining matters, the undersigned attorney may be contacted at the number set forth herein below.

Respectfully submitted,
NEOVA TECHNOLOGIES, INC.
By its attorneys:

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